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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/372,037	08/11/1999	KATSUHITO FUJIMOTO	826.1559/JDH	9963

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EXAMINER	
GRANT II, JEROME	

ART UNIT	PAPER NUMBER
2626	7

DATE MAILED: 09/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/372,037	FUJIMOTO ET AL.	
	Examiner	Art Unit	
	Jerome Grant II	2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 July 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-40* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5,9 and 38-40* is/are rejected.

7)☒ Claim(s) *6-8 and 10-37* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

JEROME GRANT II
PRIMARY EXAMINER

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

Detailed Action

1. Applicant is advised that should claim 1 be found allowable, claim 38 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

2. Claim 38 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 1. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

3. Applicant is advised that should claim 2 be found allowable, claim 39 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

4. Claim 39 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 2. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

5. Applicant is advised that should claim 3 be found allowable, claim 40 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

6. Claim 40 objected to under 37 CFR 1.75 as being a substantial duplicate of claim 3. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-5, 9, and 38-40 are rejected under 35 U.S.C. 102(e) as being anticipated by Ostronmoukhov.

With respect to claim 1, Ostromoukhov teaches an apparatus (shown by figure 5) for recognizing a gray scale image comprising: inputting means (halftone mode selector 64) for inputting gray scale images; multi-code image binary coding means (color management system 34) for converting the grey scale value to binary in which each pixel has either a background or a plotting area. The pixel having a plotting area and background area are inherent in that it depends on the type of color image being input to the system. Assuming a color magazine, for example, the plotting area, which is the textual area or the image area exist on the magazine and will have a pixel of one type of binary representation. The background of the magazine, assuming that it

could be essentially white, will have a pixel representing another type of binary representation. Hence, any image input to the system will inherently have background information and plotter information and each will be represented in terms of a pixel representation.

With respect to claims 2 and 39, Ostromoukhov teaches an apparatus for recognizing a color document image, comprising: gray scale image extracting means (color management system 34) for extracting gray scale information from a color document. See col. 6, lines 50-56. Ostromoukhov teaches a binary converter 64 for converting from gray scale to binary, see col. 6, lines 56 and 57. The pixel having a plotting area and background area are inherent in that it depends on the type of color image being input to the system. Assuming a color magazine, for example, the plotting area, which is the textual area or the image area exist on the magazine and will have a pixel of one type of binary representation. The background of the magazine, assuming that it could be essentially white, will have a pixel representing another type of binary representation. Hence, any image input to the system will inherently have background information and plotter information and each will be represented in terms of a pixel representation.

With respect to claims 3 and 40, Ostromoukhov teaches a gray scale image extracting means (via color management system 34), according to col. 6, lines 56 and 57 for extracting gray scale values from a color document. Ostromoukhov teaches both converting a grey scale to binary,

according to col. 6, lines 50-56 and extracting gray scale information from a color document. Note line 57 that refers to converting the gray level (RGB) value.

With respect to claim 4, Ostromoukhov teaches a management system 34 for taking the binary information and coding it into the form of a band or partial bit map. See col. 7, lines 1-5.

With respect to claim 5, Ostromoukhov teaches partial area extracting means (management system 34) for extracting partial gray scale images. The area is partial in that col. 6, lines 56 and 57 indicates that "for each pixel" information is extracted and converted. Thus, the pixel constitutes the partial area. Ostromoukhov teaches color management system 34 for converting gray scale level data to binary, see col. 6, lines 56-58. Ostromoukhov teaches a combining means (bitmap memory 37) for storing the entire scaled image prior to printing.

With respect to claim 9, Ostromoukhov teaches the partial area (pixel information) is extracted via system 34 for extracting gray scale values from color images. See col. 6, lines 56 and 57 where it states that "... system 34 converts the gray level RGB value of the pixel into a binary halftone value..."

With respect to claim 38, Ostromoukhov teaches an apparatus for recognizing a gray scale image (shown by figure 5), comprising: an input unit (halftone mode selecting means 64), according to col. 7, lines 52-54) for inputting gray scale images; multi-code image binary coding

means (color management system 34) for converting the grey scale value to binary in which each pixel has either a background or a plotting area. The pixel having a plotting area and background area are inherent in that it depends on the type of color image being input to the system. Assuming a color magazine, for example, the plotting area, which is the textual area or the image area exist on the magazine and will have a pixel of one type of binary representation. The background of the magazine, assuming that it could be essentially white, will have a pixel representing another type of binary representation. Hence, any image input to the system will inherently have background information and plotter information and each will be represented in terms of a pixel representation. Note also the gradient detector 105 for determining text and background areas and other characteristis of pixels with respect to neighboring pixels.

Claims Objected

Claims 6-8, 10-37 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Examiner's Remarks

Applicant requests an affidavit or a reference to support personal knowledge. This request is unneccesary and not a part of M.P.E.P. procedures. The examiner made a rejection under section 102. Perhaps a rejection under 103, assuming Official Notice was given to applicant, would require as an answer thereto an affidavit or a reference in support. However, the examiner submits that the Ostromoukhov reference teaches the claimed subject mater either specifically or inherently. The examiner contends that the system of Ostromoukhov will apply to a plurality of different types of media that will be read. In other words, the examiner urges that documents with white backgrounds and text thereon or binary generated documents are among those read by this system. There is no teaching to suggest that Ostromoukhov is designed to read only a specific type of document and that it could not read as the examiner illustrated above.

In the fifth paragraph of page 10, applicant argues that background and plotting areas are not present or suggested by 362. The examiner disagrees. The present invention utilizes gradients and gradient detection means for the purpose of designating pixel and determining if pixels are similar or different as determined by the gradient means. Pixels that are similar or are not detected by the gradient detector means, are considered as part of the same genre of pixels. If a pixel gradient of a neighboring pixel is found to be different from that of the current pixel, then the two pixels are not related with respect to the content of the image. Hence, the gradient can be

used to determine if pixels belong to a background or if then belong to a foreground image or if they are port of text or the like. The gradient can be used to determine the characteristics of the image, that is to say, whether the image is a halftone background or halftone text (plotter) information. See col. 8, lines 1-32 for the gradient teaching, as well as figure 7 and element 105.

Hence, for all the reasons presented by the applicant, the examiner disagrees for the reason that Ostromoukhov provides a teaching or suggestion of a gradient detector for detecting the different types of pixels and what they represent relative to the entire text being analyzed. This, in the examiners view, includes whether a pixel is in a background class or a plotted piece of information such as text.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR

1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jerome Grant II whose telephone number is 305-4391. The examiner can normally be reached on Mon.-Fri. from 9:00 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly Williams, can be reached on (703) 305-4863. The fax phone number for the organization where this application or proceeding is assigned is 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 305-3900.

J. Grant II

JEROME GRANT II
PRIMARY EXAMINER